

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Bulkmatic Transport Company  
Attn: Ron Chenoweth  
2351 State Street  
Chicago Heights, Illinois 60411

<u>Application No.:</u> 05040023	<u>I.D. No.:</u> 031045AOA
<u>Applicant's Designation:</u>	<u>Date Received:</u> April 12, 2005
<u>Subject:</u> Bulk Trucking, Rail to Truck Transfer	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 2351 State Street, Chicago Heights, Cook County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of

Rail to Truck Transfer System  
5 mmBtu/hour Natural Gas-Fired Boiler

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued:

- i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for volatile organic material (VOM) and 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year of any combination of such HAPs). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- ii. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs. As a result of this condition, this permit is issued based on the Rail to truck transfer system at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESAHP) for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEE.
- iii. To limit the emissions of VOM from the construction of new emission units and other modifications at the source, which occurred without first obtaining construction permit(s) between November 15, 1992 and June 15, 2005 (the period during which the Chicago area was classified as severe nonattainment for ozone), to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification.

- iv. To limit the emissions of volatile organic material from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) issued for this location.
- 2. Pursuant to 35 Ill. Adm. Code 218.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having through-put of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108.
- 3. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 4. This permit is issued based on no transfer or handling of gasoline occurring at this source. The transfer or handling of gasoline at this source will require that the Permittee first obtain a construction permit from the Illinois EPA and the demonstration of compliance with all applicable requirements.
- 5a. Emissions of volatile organic material, and HAP (hexane) for the rail to truck transfer system shall not exceed the following limits:

<u>Pollutant</u>	<u>Emissions</u>	
	<u>(Lbs/Day)</u>	<u>(Tons/Year)</u>
VOM	165	24.8
Single HAP (Hexane)	66	9.9

Note that there is a "nested" limit on the emissions of the combination of HAPs as a result of the limit on VOM emissions. The HAPs emitted at this source have been determined to be VOMs and therefore limiting VOM emissions also limits HAP emissions.

- b. The VOM and HAP emissions shall be determined from the following equation from AP-42 section 5.2-4:

$$E = M \times L / 2,000 \times 1.3$$

Where:

E = Emissions in tons

M = throughput in 1,000 gallons

L = Loading loss rate in lbs/1,000 gallons throughput

L = 12.46 X SPM/T

S = Saturation Factor

P = Vapor Pressure of Liquid Loaded (psia)

M = Molecular Weight of Liquid Loaded (lbs/lb-mole)

T = Temperature of Liquid Loaded (R)

Probable error of +/- 30%

6. Total operations and emissions of the boiler shall not exceed the following limits:

<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
	<u>Factor</u> <u>(lbs/mm scf)</u>	<u>(lbs/Hour)</u>	<u>(Tons/Year)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	0.50	2.19
Carbon Monoxide (CO)	84	0.42	1.84
Particulate Matter (PM)	7.6	0.04	0.17
Volatile Organic Material (VOM)	5.5	0.03	0.12
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.01	0.01

These limits are based on maximum firing rate, 8760 hours/year, a heat content of 1,000 Btu/scf for natural gas, and standard AP-42, tables 1.4-1 and 1.4-2, emission factors.

7. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) Permit.
8. Compliance with the annual limits of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 day total).

- 9a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- b. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Design information for the transfer systems showing the presence of a permanent submerged loading pipes;
  - ii. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipes;
  - iii. Identification of material type and throughputs for each such material handled at the source (gallons/day and gallons/year);
  - iv. Daily and annual emissions of VOM and HAP supporting calculations (lbs/day and tons/year); and
  - v. Hours of operation for boiler (hours/day and hours/year).
10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records

retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

- 11a. If there is an exceedance or deviation of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
  - b. The Permittee shall promptly notify the Illinois EPA of any transfer of VOL between truck and rail car that is not in compliance with the requirements of 35 Ill. Adm. Code 218.122(a) (e.g., no "permanent submerged loading pipe") within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.
12. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

If you have any questions on this, please call George Kennedy at 217/782-2113.

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

ECB:GMK:psj

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from bulk gasoline terminal operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such transfer system. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for NO<sub>x</sub>, CO, VOM and 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for total combined hazardous air pollutants (HAPs)) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that control measures are more effective than required in this permit.

E M I S S I O N S (Tons/Year)							
<u>Emission Unit</u>	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>	Single <u>HAP</u>	Total <u>HAPs</u>
Rail to Truck							
Transfer System	---	---	---	---	24.80	9.9	24.8
Fuel Combustion	<u>1.84</u>	<u>2.19</u>	<u>0.17</u>	<u>0.01</u>	<u>0.12</u>	----	----
Totals	1.84	2.19	0.17	0.01	24.92	< 10	< 25

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